

Patent Claims

1 1. A device for the continuous casting of metals,
2 especially steel materials, to elongated products in a multistrand
3 casting apparatus with a plurality of continuous casting molds
4 which are separately mounted in respective oscillating frames (2)
5 oscillatingly driven in a casting direction (1), the casting frames
6 being mounted on both sides of the casting strands (3) by leaf
7 spring pairs (4) which extend transversely to the casting direction
8 for guiding and weight compensation on a foundation frame,
9 characterized in that,

10 two housings (6a) configured as compact flat cassettes
11 (6) are arranged one behind the other in the continuous casting
12 direction (1) on an elongated foundation frame (5), in which
13 housing upper and lower leaf spring pairs (4a; 4b) extend
14 transversely to the cast strands (3) and that oscillating drives
15 (11) engage the leaf spring pairs (4a; 4b), whereby a front
16 oscillating drive (11a) operates synchronously with the rear
17 oscillating drive (11b).

1 2. The device according to claim 1,
2 characterized in that,
3 the front oscillating drive (11a) is set with respect to
4 the rear oscillating drive (11b) for an arcuate path (13) fo the
5 cast strand (3) to operate with different strokes.

1 3. The device according to one of claims 1 or 2,
2 characterized in that,
3 the oscillating drives (11a; 11b) are comprised of hydraulic drive
4 units.

1 4. The device according to one of claims 1 to 3,
2 characterized in that,
3 the flat cassettes (6) are comprised of two rectangular frames (16)
4 each of which has two leaf spring pairs (4a; 4b) forming a leaf
5 spring spaced apart in height, the frames being spaced apart in the
6 strand travel direction (1) and in that between the rectangular
7 frames a mold support frame (17) is arranged.

1 5. The device according to one of claims 1 to 4,
2 characterized in that,
3 oscillating drive units (14) each are arranged in the median plane
4 (19) of the continuous casting strand (3) beneath the two
5 rectangular frames (16) and between longitudinal beams (5a; 5b) of
6 the foundation frame (5).

1 6. The device according to one of claims 1 to 5,
2 characterized in that,
3 in the foundation frame (5) between longitudinal beams (5a; 5b)
4 suspension elements (20) are pivotally mounted for suspending a
5 support roll segment.

1 7. The device according to claim 6,
2 characterized in that,
3 the suspending elements (20) are comprised of a respective double
4 arm lever (20) pivotally mounted on the longitudinal beam (5a; 5b),
5 with a suspension trough (22) on one lever end (21a) and an
6 adjusting device (23) connected to another lever end (21b).

1 8. The device according to one of claims 1 to 7,
2 characterized in that,
3 a water clamping plate (9) for supplying the continuous casting
4 mold with a cooling medium is arranged on the rear flat cassette
5 (6b) and the cooling medium feed (10) and the cooling medium
6 discharge (24) run rearwardly away from the cast strand (3).